Teleflex INCORPORATED
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Troy, MI 48083-1122

LABORATORY REPORT

Subject:	CHRYSLER N-Truck ATX Shifter	T.A. No.:	3834
Report Type:	BENCH - PRODUCT VALIDATION	File No.:	64S7010V.PF2
Part Number(s):	964J-S7010	Date:	March 15, 1996

Title: DURABILITY OF CHRYSLER N-TRUCK, ATX SHIFTER CONTROL ASSEMBLY

OBJECTIVE:

Determine if the shifter assembly conforms to the Teleflex specification Dwg 974J-S7005, Abusive Load Test, Note 14.

SAMPLE DESCRIPTION:

Thirty (30) Samples Durability Test: TFX. Part No 964J-S7010, Date Code None, Date Received 02/27/96, Test Numbers T96-0591 thru, T96-0620

SUMMARY:

Abusive Load; (section 14) Twenty three (23) out of thirty (30) passed the lock mechanism during the high temperature test. Two (2) failed samples had an incorrect lock tab material. The two (2) failed samples were loaded incorrectly. Three (3) failed samples experienced temperatures at the lock assembly in excess of 110°C.

SPECIFICATION:

Abusive Load; (section 14)

Requirements; Control must pass a 333.4N load out of the park position while at a temperature of -40°C, 23°C, and 177°C and traveling for 100 cycles.

PROCEDURE:

A load of 333.4N out of the park position was applied to all controls for 100 cycles while at each of the following temperatures -40°C, 23°C, and 177°C (trans end fitting only). The control was allowed to stabilize at the above temperature for a minimum of one (1) hour prior to the load being applied.

Distribution: Sales (S), Reliability ( ), Manufacturing ( ), Library (L), Project File (P),
cc: O. Iwasiuk, K. McMahon, M. Reasoner, J. Laperriere, W. Bates

Signed: Paul Folian 4/15/96
Paul Folian
Lab Technician

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DATA:

Abusive Load Test - Test No. 14
Lock Tab Material - PSA

Sample No.	Test Temperatures: Room Temperature	178°C	-40°C
1	Pass	Fail	Pass
2	Pass	Fail	Pass

Note: - Fail is the point at which the lock assembly skips a tooth, ratchets, and or strips.

Lock Tab Material - 70G33

Sample No.	Test Temperatures: Room Temperature	178°C	-40°C
1	N/A	N/A	N/A
2	N/A	N/A	N/A
3	Pass	Pass	Pass
4	Pass	Pass	Pass
5	Pass	Pass	Pass
6	Pass	Pass	Pass
7	Pass	Pass	Pass
8	Pass	Pass	Pass
9	Pass	Pass	Pass
10	Pass	Pass	Pass
11	Pass	Pass	Pass
12	Pass	Pass	Pass
13	Pass	Pass	Pass
14	Pass	Pass	Pass
15	Pass	Pass	Pass
16	Pass	Pass	Pass
17	Pass	Pass	Pass
18	Pass	Pass	Pass
19	Pass	Fail*	Pass
20	Pass	Pass	Pass
21	Pass	Pass	Pass
22	Pass	Pass	Pass
23	Pass	Fail*	Pass
24	Pass	Pass	Pass
25	Pass	Fail*	Pass
26	Pass	Pass	Pass
27	Pass	Pass	Pass
28	Pass	Pass	Pass

Note: - *The failure of these samples is due a temperature of the lock assembly in excess of 110°C.
- N/A, incorrect loading procedure.

OBSERVATIONS:

1) The grommet at the dash panel deforms at a minimum temperature of 95°C
2) The column end fitting allows the control to be missadjusted if the temperature is in excess of 70°C. This maybe casued by a the material type, bracket thickness, and or the dimension of the lock ears being out of print.

EQUIPMENT:

XYY Recorder: Hewlett Packer Plotter, Model No. 7090A, Serial No. 2434A00491
Calibration Date 02/29/95.
LVDT: Shavitz, Type 2000 HR, Serial No. 13325, Calibration Date 10/22/94
Load Cell: Interface, Model No. SM-100, Serial No. B05437
Bridge Amp: Gould, Model 11-4123-01, Serial No. 01205-01
Calibration done at time of Test.
Durability Fixture: Designed and Built by Teleflex Inc.